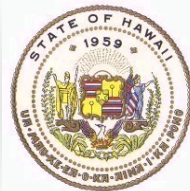




# Pharmaceutical P-listed Hazardous Waste Residue

State of Hawaii, Department of Health



2015

## Background Information

This guidance is intended to clarify applicable regulations in Hawaii regarding the disposal of containers holding p-listed hazardous waste residue. P-listed hazardous wastes are also known as “acute hazardous wastes” due to the dangers they can pose to human health in very small quantities. Some common acute hazardous pharmaceutical wastes include, arsenic trioxide (Trisenox), epinephrine (EpiPen; adrenaline), nicotine patches, and warfarin.

## Knowledge and Analysis

**For containers that once held p-listed hazardous waste, the entire container or inner liner must be managed and disposed as a p-listed hazardous waste unless the container is technically “RCRA empty” (see below for definition).** The weight of the entire container or inner liner must be counted towards the amount of hazardous waste generated monthly at each site. A site generating over 1 kg of p-listed hazardous waste in a calendar month is a Large Quantity Generator.

Hawaii Administrative Rule §11-261-7(b)(3) provides that a container is considered “RCRA empty” as follows:

*A container or an inner liner removed from a container that has held an acute hazardous waste listed in sections 11-261-31, 11-261-32, or subsection 11-261- 33(e) is empty if:*

- (i) The container or inner liner has been triple rinsed using a solvent capable of removing the commercial chemical product or manufacturing chemical intermediate;*
- (ii) The container or inner liner has been cleaned by another method that has been shown in the scientific literature, or by tests conducted by the generator, to achieve equivalent removal; or*
- (iii) In the case of a container, the inner liner that prevented contact of the commercial chemical product or manufacturing chemical intermediate with the container has been removed.*

If containers or inner liners are triple rinsed utilizing a solvent that removes the p-listed residue, the container is considered “RCRA empty” by the Hawaii Department of Health (HDOH). In this case:

- The rinsate must be collected, managed, and disposed as p-listed hazardous waste since it holds the p-listed residue. The rinsate must be counted towards the amount of hazardous waste generated monthly by the site.
- The “RCRA empty” container would no longer need to be managed or disposed of as hazardous waste after triple rinsing.
- In most cases, the rinsate generated by this process would likely be more burdensome to manage as hazardous waste than the original containers.

The HDOH has reviewed the EPA memorandum on this topic dated November 4, 2011 and does not concur with EPA’s analysis. As stated in the last paragraph of the EPA memorandum, generators of hazardous wastes must follow the regulations of states authorized to implement the RCRA program, which includes Hawaii, when state regulations are equivalent to or more stringent than federal regulations.